

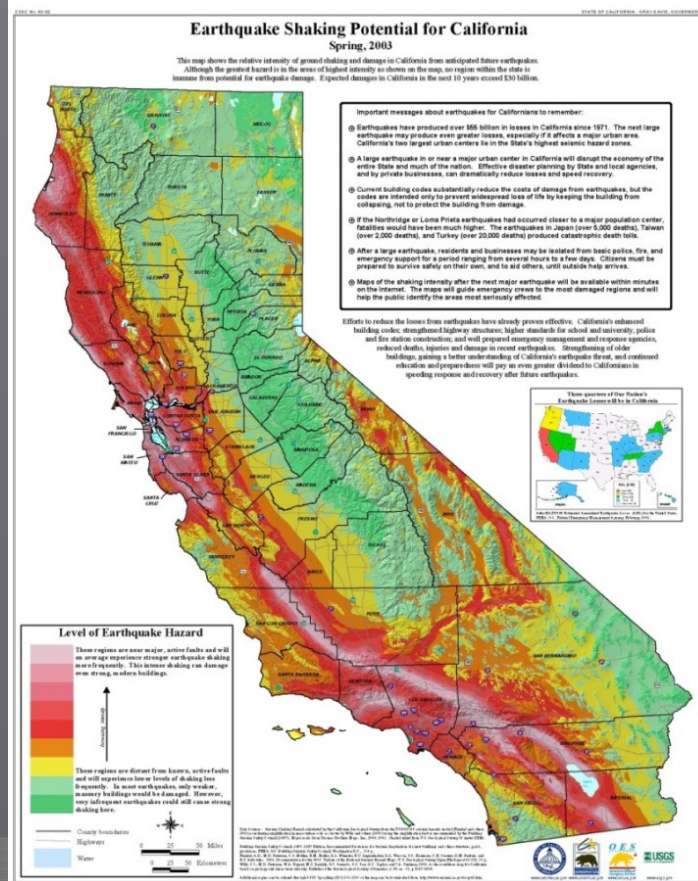
With a focus on lessons learned from the 2011 Japan Earthquake

EMERGENCY PLANNING UPDATES

Today's Topics

- ⦿ Earthquake Update
- ⦿ Tsunami Update
- ⦿ NPP Update Overview
 - ETE Update
 - Plume Monitoring
 - IPZ Updates
 - New Regulations
 - Other Projects
 - Fukushima Lessons Learned
- ⦿ Training, Drills, and Exercises

Earthquake Update



Japan Earthquake

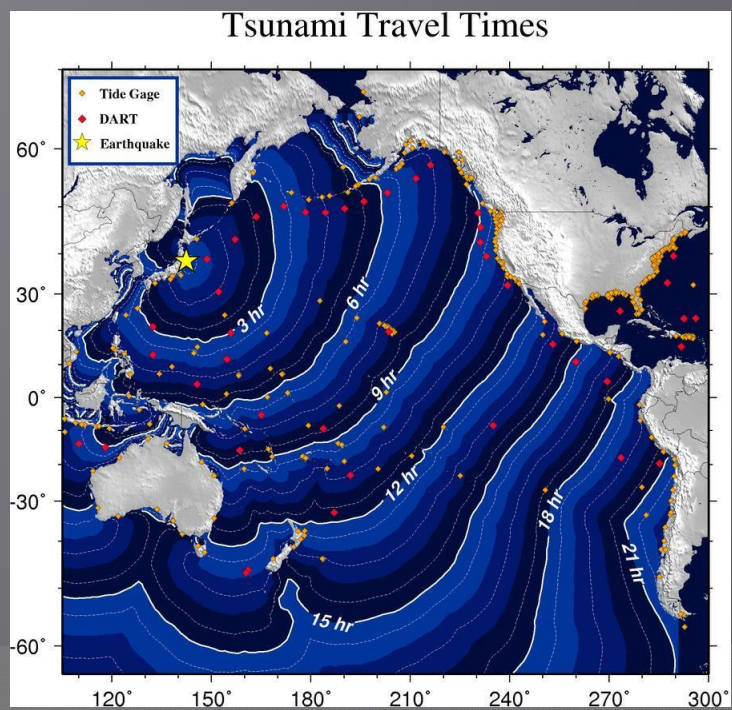
- ◎ 9.0 in magnitude centered in a subduction zone.
- ◎ Buildings and infrastructure performed as designed.
 - Majority of damage due to tsunami.
- ◎ Resulted in secondary hazards



Earthquake Planning Update

- ⦿ Reaffirmed importance of Earthquake Plan
- ⦿ Secondary hazard awareness
- ⦿ Infrastructure Checks – roads, bridges
- ⦿ Dam and Levee verification checks
- ⦿ Backup communications and power options
- ⦿ Incorporation of Earthquake analysis into Evacuation Times Estimate (ETE)

Tsunami Update

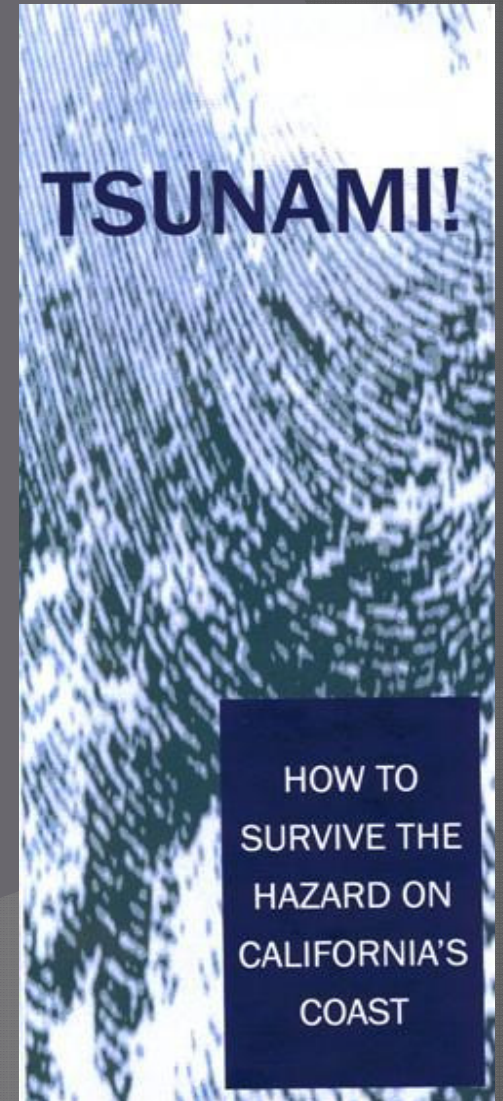


Japan Tsunami

- ⦿ Caused majority of damage and deaths.
- ⦿ Struck closest areas approximately 26 minutes after earthquake.
- ⦿ 101 designated tsunami evacuation sites were hit.
- ⦿ Many did not heed evacuation orders.
- ⦿ Debris became secondary hazard.

Tsunami Update

- ⦿ Reaffirms importance of tsunami education
- ⦿ Reaffirms conservative tsunami inundation mapping.
- ⦿ Plan updated to include actions taken during tsunami.
- ⦿ County developing tsunami outreach and tsunami signage campaign.



Tsunami Debris

- ◎ NOAA is leading efforts
- ◎ Track, assess, and reduce impacts of debris.
- ◎ Debris fields have dispersed.
- ◎ Large items and hazardous materials still an issue.
- ◎ Beach cleanups and debris reporting may be necessary.

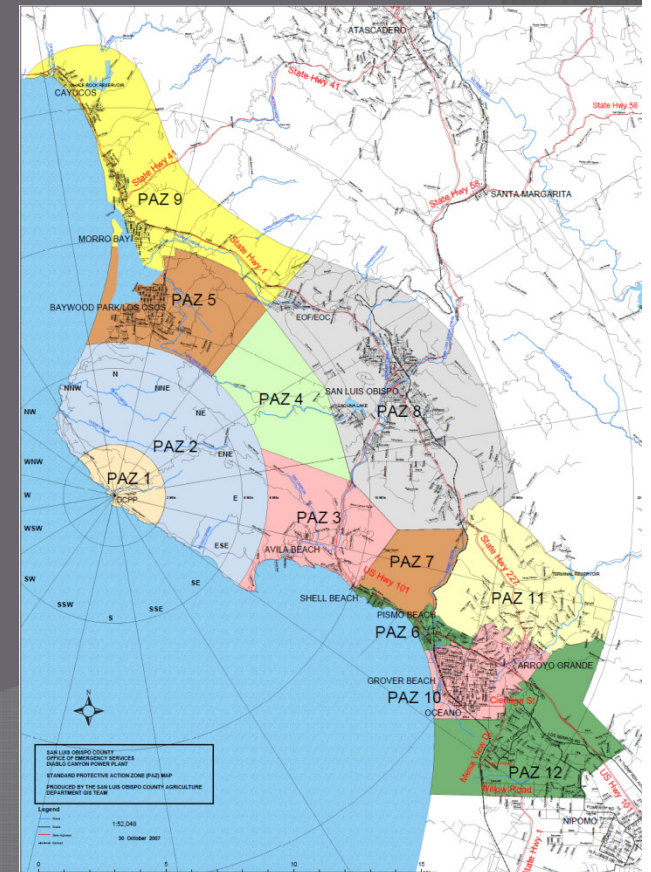


Nuclear Power Plant Planning Updates



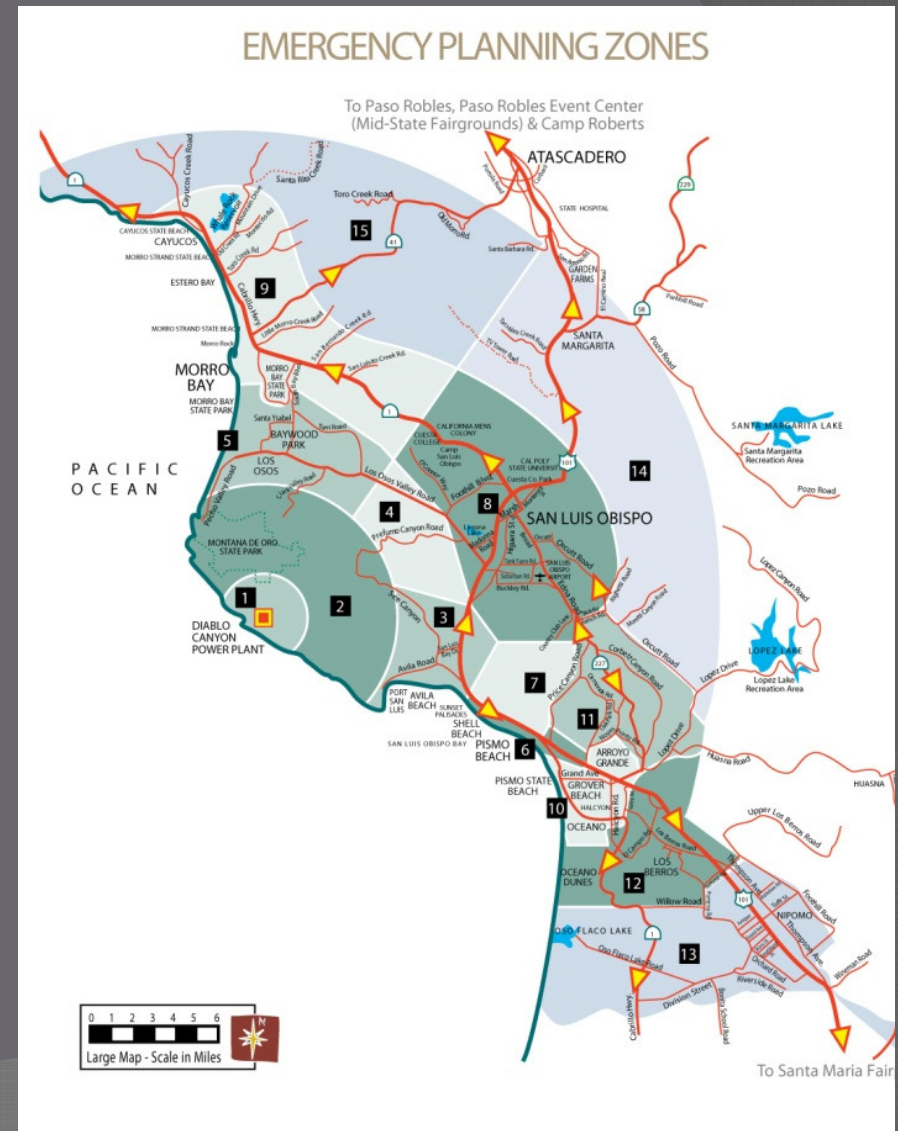
Emergency Planning Zone (EPZ) Description

- Area surrounding a nuclear power plant where protective actions may be issued.
- Federal requirement for EPZ is a 10 mile radius.
- SLO County adopted an expanded area
- EPZ is broken into Protective Action Zones (PAZ) for planning purposes.



Public Education Zone (PEZ) Description

- Stretches beyond Emergency Planning Zone.
- Protective actions are not expected to be needed.
- Residents are provided annual emergency information.



Ingestion Pathway Zone (IPZ) Description

- ⦿ A 50 mile radius around a nuclear power plant.
- ⦿ IPZ is segmented into Agricultural Areas
- ⦿ To facilitate protections of food and water supplies from radioactive contamination.
- ⦿ Food, water, livestock, may be held, or quarantined until testing can be conducted.

Evacuation Times Estimate (ETE)

- ◎ To assist in evacuation planning and decision making
- ◎ Provides population information and variations to assist evacuation decisions.
- ◎ Additional scenarios involving earthquakes were analyzed.
- ◎ SLO County and DCPP are proactive in updating and enhancing the document ahead of regulatory requirements.

Plume Monitoring

- ◎ Plume modeling software and abilities are essential for radiological emergencies.
- ◎ Plume modeling allows decision makers to focus actions.
- ◎ Significant system enhancements have recently been completed.
- ◎ Enhancements include input of additional meteorological data as well as SODAR stations to identify upper air patterns.

Ingestion Pathway Zone Plan (IPZ) Enhancements

- ⦿ Update and realignment of the Ingestion Pathway Zone and Agricultural Areas using GIS.
- ⦿ Update and redistribution of Agricultural Brochure
- ⦿ State and local plan improvements to increase consistency and identify roles and responsibilities.

New Regulations

- ⦿ Updated regulations governing nuclear power plant emergency response -Released in December.
- ⦿ Regulations predate emergency at Fukushima.
- ⦿ Regulations will be implemented by early 2014.
- ⦿ SLO County plans currently meet many of the new requirements

New Regulation Summary

- ⦿ Alert and Notification System Changes
- ⦿ Back-up Route Alerting Changes
- ⦿ Facility Inspections
- ⦿ Exercise Cycle/Frequency
- ⦿ Scenario Variation and Challenges
- ⦿ NIMS/ICS Incorporation

Additional NPP Projects

- ⦿ Redistribution of agency responsibilities.
- ⦿ Agricultural partner workshops and education.
- ⦿ Hostile action plan updates
- ⦿ Recovery plan enhancements, training and exercises.

Post Fukushima Lessons Learned

- ◎ Actively participating in formal and informal Fukushima lessons learned opportunities.
- ◎ Ideas, issues, and recommendations will be integrated into plans.
- ◎ Many issues that have been identified are already accommodated for in the plans.
- ◎ SLO County strives to exceed federal planning standards, will continue to do so.

Training and Exercises



Nuclear Power Plant Training and Exercises

- ◎ 5,576 hours of training conducted by OES during 2011
- ◎ Exercises test the plans and capabilities
- ◎ Formally evaluated by FEMA
- ◎ FEMA did not identify any areas that needed correction.



Recent Exercises

- ◎ 2008 Tsunami Warning & Radiological Release
- ◎ 2009 Emergency Worker Monitoring and Decon
- ◎ 2009 Evacuee Monitoring and Decontamination
- ◎ 2010 100 Year Storm & Radiological Release
- ◎ 2011 Personnel Injury and Radiological Contamination
- ◎ 2011 Earthquake and Radiological Release
- ◎ 2011 Hostile Action
- ◎ 2011 Evacuee Monitoring and Decontamination Exercise

For Additional Emergency Planning Information:

County Office of Emergency Services

781-5011

www.slocounty.ca.gov/OES

